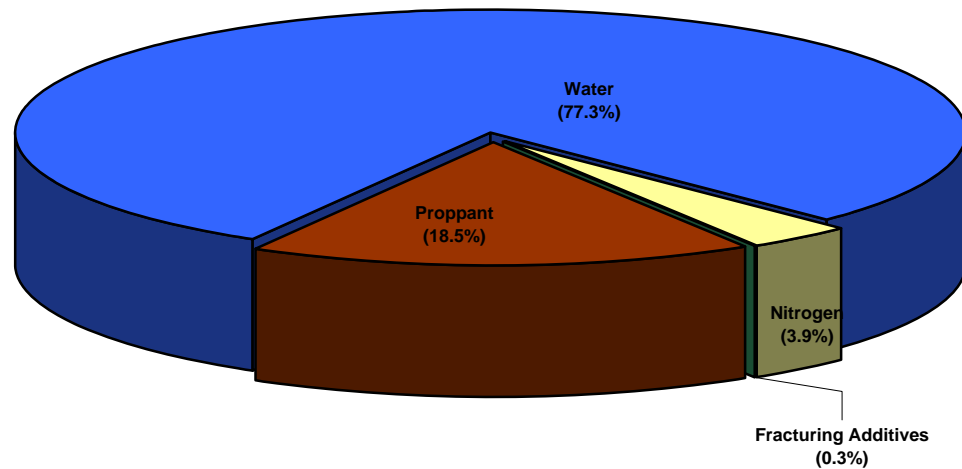




02-29-032-03W5M			Tamarack Valley Energy			15-Jul-12			
Trade Name	Supplier	Purpose	Fluid Comment	Cas #	Ingredient Name	Volume [m3 or scm]	Max Additive Concentration (%)	Max Fluid Concentration (%)	Ingredient Comment
Water	Tamarack	Carrier / Base Fluid		7732-18-5	Water	2078.9	100	78.73	
Nitrogen	Calfrac	Nitrogen		7727-37-9	Nitrogen	71,002	99	3.70	
Sand (Proppant)	Calfrac	Propping Agent		14808-60-7	Crystalline Silica (Quartz)		99.9	17.09	
DWP-913, DWP-621, DWP-949, DWP-966	Calfrac	Clay Control, Friction Reducer, Non-Emulsifier, Biocide							
					Non-Hazardous Additive		100	0.25	
				Proprietary	Organic Acid Salts		63	0.05	HMIRC #8300
				Proprietary	Ethoxylated Alcohols		40	0.03	HMIRC #8300
				Proprietary	Isobutyl Ketone		30	0.03	HMIRC #8300
				Proprietary	Ethoxylated phenolic resin		10	0.01	HMIRC #8300
				67-56-1	Methanol		60	0.06	
				Proprietary	Bronopol		100	0.05	HMIRC #8461

Items Pumped Past The Well Head - Summary



Fracturing Additives - % Breakdown

